0054660

Recra LabNet - Lionville Laboratory INORGANIC ANALYTICAL DATA PACKAGE FOR TNUHANFORD B99-093 H1172

DATE RECEIVED: 12/01/00

RFW LOT # :0012L422

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B111F1						
<pre>% MOISTURE % MOISTURE % SOLIDS % SOLIDS</pre>	001 001 REP 001 001 REP	so so	00L%S192 00L%S192 00L%S192 00L%S192	11/29/00 11/29/00 11/29/00 11/29/00	12/04/00 12/04/00 12/04/00 12/04/00	12/05/00 12/05/00 12/05/00 12/05/00
B111F2						
% MOISTURE % SOLIDS	002 002		00L%S192 00L%S192	11/29/00 11/29/00	12/04/00 12/04/00	12/05/00 12/05/00
B111F3						
% MOISTURE % SOLIDS	003 003		00L%S192 00L%S192	11/29/00 11/29/00	12/04/00 12/04/00	12/05/00 12/05/00
B111F4						
% MOISTURE % SOLIDS	004 004		00L%S192 00L%S192	11/29/00 11/29/00	12/04/00 12/04/00	12/05/00 12/05/00
B111D7						
% MOISTURE % SOLIDS	005 005		00L%S192 00L%S192	11/29/00 11/29/00	12/04/00 12/04/00	12/05/00 12/05/00
B111D8						
% MOISTURE % SOLIDS	006 006		00L%S192		12/04/00 12/04/00	12/05/00 12/05/00
B111D9						
% MOISTURE % SOLIDS	007 007		00L%S192	• •	12/04/00 12/04/00	12/05/00 12/05/00
B111F0						
% MOISTURE	008	sc	00L%S192	11/29/00	12/04/00	12/05/00



Recra LabNet - Lionville Laboratory INORGANIC ANALYTICAL DATA PACKAGE FOR TNUHANFORD B99-093 H1172

DATE RECEIVED: 12/01/00

RFW LOT # :0012L422

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
		- —				
% SOLIDS	008	so	00L%S192	11/29/00	12/04/00	12/05/00



Chemical and Environmental Measurement Information

Recra LabNet Philadelphia Analytical Report

Client: TNU-HANFORD B99-093 H1172

W.O. #: 10985-001-001-9999-00

RFW#: 0012L422

Date Received: 12-01-00

INORGANIC CASE NARRATIVE

1. This narrative covers the analyses of 8 solid samples.

- 2. The samples were prepared and analyzed in accordance with the method checked on the attached glossary.
- 3. Sample holding times as required by the method and/or contract were met.
- 4. The cooler temperature was recorded on the chain-of-custody.
- 5. The replicate analyses were within the 20% Relative Percent Difference (RPD) control limit.
- 6. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.

J. Michael Taylor

VP, Laboratory General Manager

Lionville Laboratory

01-15-01

Date

njp\i12-422

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 10 pages.

Recra LabNet Philadelphia

WET CHEMISTRY METHODS GLOSSARY FOR SOIL/SOLIDS SAMPLE ANALYSIS

	<u>ASTM</u>	<u>SW846</u>	<u>OTHER</u>
% Ash	D2216-80		
% Moisture	Z D2216-80		ILMO4.0 (e)
% Solids	7 D2216-80		ILMO4.0 (e)
% Volatile Solids	D2216-80		_
ASTM Extraction in Water	D3987-81/85		
BTU	D240-87		
CEC		9081	_ c
Chromium VI		3060A/7196A	
Corrosivity by coupon by pH		1110(mod) 9045C	
Cyanide, Total		9010B	ILMO4.0 (e)
Cyanide, Reactive		Section 7.3/9014	
Halides, Extractable Organic		9020B	EPA 600/4/84-008
Halides, Total		9020B	EPA 600/4/84-008
EP Toxicity		1310A	
Flash Point		1010	
Ignitability	•	1010	
Oil & Grease		9071A	
Carbon, Total Organic		9060	Lloyd Kahn (mod)
Oxygen Bomb Prep for Anions	D240-87(mod)	5050	
Petroleum Hydrocarbons, Total Re	ecoverable	9071	_ EPA 418.1
pH, Soil		^{9045C}	
Sulfide, Reactive		Section 7.3/9030B	
Sulfide		9030B(mod)	
Specific Gravity	D1429-76C/ _	D5057-90	
Sulfur, Total		— ⁹⁰⁵⁶	
Synthetic Preparation Leach		1312	
Paint Filter		9095A	
Other:	Method:		
Other:	Method		

Recra LabNet Philadelphia METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

- U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.
- * = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

MB = Method or Preparation Blank.

MS = Matrix Spike.

MSD = Matrix Spike Duplicate.

REP = Sample Replicate

LC = Laboratory Control Sample.

NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

- 1. ASTM Standard Methods.
- 2. USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).
- 3. Test Methods for Evaluating Solid Waste (USEPA SW-846).
- a. Standard Methods for the Examination of Water and Waste, 16 ed, (1983).
- b. Standard Methods for the Examination of Water and Waste, 17 ed, (1989)/18ed (1992).
- c. <u>Method of Soil Analysis</u>, Part 1, Physical and Mineralogical Methods, 2nd ed, (1986).
- d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965).
- e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.
- f. Code of Federal Regulations.

L-WI-034/D-6/99

Recra LabNet - Lionville

INORGANICS DATA SUMMARY REPORT 01/15/01

CLIENT: TNUHANFORD B99-093 H1172 WORK ORDER: 10985-001-001-9999-00 RECRA LOT #: 0012L422

					REPORTING	DILUTION
Sample	SITE ID	ANALYTE	RESULT	UNITS	LIMIT	PACTOR
	=======================================		*****	###===	*****	******
-001	B111F1	* Moisture	51.7		0.0	1.0
		% Solids	48.3	•	0.01	1.0
-002	B111F2	* Moisture	44.4		0.0	1.0
		% Solids	55.6	*	0.01	1.0
-003	B111F3	* Moisture	7.8		0.0	1.0
		% Solids	92.2	•	0.01	1.0
-004	B111F4	* Moisture	43.0		0.0	1.0
		% Solids	57.0	*	0.01	1.0
-005	B111D7	* Moisture	11.4		0.0	1.0
		* Solids	88.6	•	0.01	1.0
-006	B111D8	* Moisture	44.8		0.0	1.0
		* Solids	55.2	•	0.01	1.0
-007	B111D9	* Moisture	44.3		0.0	1.0
		* Solids	55.7	*	0.01	1.0
-008	B111P0	* Moisture	5.2		0.0	1.0
		* Solids	94.8	*	0,01	1.0

Recra LabNet - Lionville

INORGANICS PRECISION REPORT 01/15/01

CLIENT: TNUHANFORD B99-093 H1172

RECRA LOT #: 0012L422

WORK ORDER: 10985-001-001-9999-00

110101 01000	•••			•		
			INITIAL			DILUTION
SAMPLE	SITE ID	ANALYTE	RESULT	RBPLICATE	RPD	FACTOR (REP)
		************		========		*********
-001REP	B111F1	% Moisture	51.7	55.4	6.9	1.0
		* Solids	48.3	44.6	7.9	1.0

Cilent	.42°	Hanford	<u>B99</u>	1-093)		Refrige	rator#	Liquid	A:				1					
Est. Final Pro	J. Sem 7929	eted gniko	y-999	0 0·p			#/Туре	Container	Solid	VPG				4				119 127	
Project Conta	ct/Pho	ne #					Volume	•	Liquid	_								11 11 12 12	<u> </u>
RECRA Proje	ct Man	iger OJ_		7.	1		Preser	vativee	Solid	<u> 250</u>							<u> </u>	接	-
o spre		Del <u>510</u>	TAT	<u>න</u>	ny.		71000	· · · · · · · · · · · · · · · · · · ·			ORG	ANIC	<u> </u>			IN	ORG		-
	15-1	<u>:00</u>	Date Due .	16.31	<u>ÖÖ</u>		REQUE		-	δ	BNA	Pest/ PCB	Ę.			Metal	중		
ccount #	I -	<u> </u>				Matrix		1					1	1	RECF	IA LabNe	t Use	12.71	<u> </u>
ATRIX ODES: - Soil E - Sediment O - Solid L - Sludge	Leb ID	CII	ent ID/Descr	iption		QC Chosen (V)	Matri x	Date Collected	Time Collected	CCENK				I%mST					
Mater	COI	BILIFI					50	112700	1115	_				1				Į.	Ľ
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- Other - Fish	$\alpha \alpha$	1 08					 1	 	1035	<u> </u>	├					_ -	-	 	L
	<u> [00</u>	Pa					-	├ 	1050	1	-	ļ.—					-	 	H
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pecial Instructi	l lons: C	5a 9 B99	1.093			DATE	REVISIO	NS:	<u> </u>	.1	L	<u> </u>					<u> </u>	REC	R/
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χA÷Cα	irbo	on tetrek	ihloria	76				3 4 5 6		-			 			2 3 4			in Go

Date

15-150 WAYS

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COMPOSITE

WASTE

bNet Use Only COC Tape was:

(F) or N

Discrepancies Between

COC Record? Y or (N)

4235 7954 0815

Samples Labels and

NOTES:

Date

ORIGINAL

by

Time

5) Received Within Holding Times

(Y) or N

Y or N 4) Unbroken on Sample (Y) or N COC Record Present

1) Present on Outer Package (Y) or N 2) Unbroken on Outer Package or N
3) Present on Sample

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Upon Sample Rec't or N Cooler 4.5 ·c

7)	
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Bechtel Hanford Inc. CHAIN OF CUSTODY/SAMPI				LE AN	<u>ALYSI</u>	S F	REQUEST			199-093-20				
Collector TMJOHANSEN		Compa	ny Contact OHAY	Telepho 372-9	ne No.			#	roject Coordin RENT, SJ	ator	Price Code	9N		rnaround Days
Project Designation	Soil Vapor Extraction - Other Solid		ing Location W						AF No. 199-093		Air Qual	ity []		
	099.008 LU	A Field I	ogbook No. 1516		COA R207.	\ .P2DP60		N	lethod of Ships FED EX	ncat				
Shipped T TMARECRA			Property No.	000	36	₹ ,	1		Bill of Lading/		295	3 0	875	· I
POSSIBLE SAMPI	LE HAZARDS/REMARKS		Preservation	Cool 4€										
			Type of Container	aG										
			No. of Container(s)	ı										
Special Handling as Sample originated in	nd/or Storage non radiological zone <2000pci/g		Volume	250mL										
	SAMPLE ANAL	.Ysis		VOA - 8260A (TCL) (Carbon tetrachloride) Moisture Content - D2216										
Sample No	. Matrix *	Sample Date	Sample Time	90 m	je:	- 41		12.5			为	产品 经	发展	
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B111F3	OTHER SOLID	11-29-0		X			_						 	ļ
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SECTION													D-4-71:	···
FINAL SAMPLE DISPOSITION	Disposal Method						Disposed B	iy					Date/Time	

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMP					AWITY TO	D L	TEGOED!					Page 1	of <u>1</u>
Collector TMJOHANSEN	Compar VJR(ny Contact OHAY	Telepho 372-9	ne No.			F	Project Coordin TRENT, SJ		Price	Code	9N		rnaround Dove
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid	Samplii 200W	ng Location W						SAF No. 399-093		Air Q	uality	[.]	45	Days
lee Chest No. ERC 99.668 (10f1)	EL-t:				A P2DP60		٨	lethod of Ships FED EX	nent			·_		
Shipped 16 TMA RECRA	Offsite	Property No.) ø3'	<u>T</u>			1	Bill Clading/		7 5.	3 - 1	08	75	
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	Coal 4C				÷							
		Type of Container	жG											
	[No. of Container(s)	l l											
Special Handling and/or Storage Sample originated in non radiological zone <2000pci/g	` [Volume	250mL											
SAMPLE ANALYSIS			VOA - 8260A (TCL) (Carbon tetrachloride); Moisture Content - D2216											
Sample No. Matrix * Sam	ple Date	Sample Time					i y	1, 24 to 3 \$60 5 to 5 to		·	11	艾涛家 艾	强;沈	
B111D7 OTHER SOLID //	71/60	1320	X											
B111D8 OTHER SOLID //-	24-0	/035	X											
B111D9 OTHER SOLID	24i.00	1050	×							\perp				
B111F0 OTHER SOLID //- 2	29-W	וטו	X	<u> </u>										
CHAIN OF POSSESSION S	ign/Print	Names	<u></u>	1	PECIAL I	INSTRUCT	'ION'	<u> </u>			l			Matrix *
Refinancished the Remarks From Date/Time 800 Regent	证书		<i>III</i> 1(<i>)</i> :	100 Elo	** Laborato compounds f	ry may use m found.	edium	level preparation % Moisture data a		-	•	-	genated	S-Soli SE-Sediment SO-Solid S -Sludge
Charles Hy R. Thore Ductime Of the Remin	18, D	P X Da	30/00					. 20						W = Water O-OH A=Ale DS-Drune Solids DL=Drune Liquids
Relinquished By Date/Time Received Processing Processing Date/Time Received Processing P		ن واجد فيم	oc/-/ nte/Time	5	Col	lector not	avai	Ref.# A post on A post of the control of	uish s	728) amples	らて	-		T+Tissue WI+Wipe L+Liquid V+Vegetation X+Other
Relinquished By Date/Time Receive	ed By	Da	dc/Time		VII _	יטכיישו		Yor surbmen	. .	[1	130/	∞		•
LABORATORY Received By SECTION			Tit	tle								Da	te/Time	
FINAL SAMPLE Disposal Method						Disposed B	y					Da	atc/fime	

Recra LabNet - Lionville Laboratory VOA ANALYTICAL DATA PACKAGE FOR TNUHANFORD B99-093 H1172

DATE RECEIVED: 12/01/00 RFW LOT # :0012L422

CLIENT ID	RFW #		MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B111F1	001	M1	so	00LVN409	11/29/00	N/A	12/09/00
B111F1	001 MS	M1	SO	00LVN409	11/29/00	N/A	12/09/00
B111F1	001 MSI) M1	80	00LVN409	11/29/00	N/A	12/09/00
B111F2	002	M1	SO	00LVN410	11/29/00	n/a	12/11/00
B111F3	003	Ml	SO	00LVN410	11/29/00	N/A	12/11/00
B111F4	004	M1	SO	00LVN409	11/29/00	N/A	12/09/00
B111D7	005	M1	SO	00LVN409	11/29/00	N/A	12/09/00
B111D8	006	M1	SO	00LVN409	11/29/00	N/A	12/09/00
B111D9	007	Ml	SO	00LVN410	11/29/00	n/a	12/11/00
B111F0	008	Ml	so	00LVN410	11/29/00	N/A	12/11/00
LAB QC:							
VBLKIZ	MB1		s	00LVN409	N/A	N/A	12/09/00
VBLKIZ	MB1 BS		S	00LVN409	N/A	N/A	12/09/00
VBLKIQ	MB1		S	00LVN410	N/A	N/A	12/11/00





Chemical and Environmental Measurement Information

Recra LabNet Philadelphia

Analytical Report

Client: TNU-HANFORD B99-02

RFW #: 0012L422

SDG/SAF #: H1172/B99-02

W.O. #: 10985-001-001-9999-00

Date Received: 12-01-2000

GC/MS VOLATILE

Eight (8) solid samples were collected on 11-29-2000.

The samples and their associated QC samples were analyzed according to criteria set forth in Recra OPs based on SW 846 Method 8260A for client specified Volatile target compound Carbon Tetrachloride on 12-09,11-2000.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

- 1. The cooler temperature upon receipt has been recorded on the chain-of-custody.
- 2. All samples were analyzed within required holding time.
- 3. All samples required a medium level analysis and an additional dilution due to high levels of target compound Carbon Tetrachloride. The summary report does not reflect the correct dilution factors due to programming limitations.
- 4. All surrogate recoveries were within EPA QC limits.
- 5. All matrix spike recoveries were within EPA QC limits.

All blank spike recoveries were within EPA QC limits.

The target compounds are not included in the spiking solution. (CLP spike recoveries have been reported on the Form 3.)

01-18-01

6. Internal standard area and retention time criteria were met.

J. Michael Taylor

V.P./Laboratory General Manager

Lionville Laboratory

som\group\data\voa\tnu-hanford-0012-422.doc

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 10 pages.

02

GLOSSARY OF VOA DATA

DATA QUALIFIERS

- U = Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D = Identifies all compounds identified in an analysis at a secondary dilution factor.
- I = Interference.
- NQ = Result qualitatively confirmed but not able to quantify.
- N = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X = This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y = Additional qualifiers used as required are explained in the case narrative.

mmz\10-94\gloss.voa



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GLOSSARY OF VOA DATA

ABBREVIATIONS

BS	=	Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
BSD	=	Indicates blank spike duplicate.
MS	**	Indicates matrix spike.
MSD	=	Indicates matrix spike duplicate.
DL	=	Suffix added to sample number to indicate that results are from a diluted analysis.
NA	3 5	Not Applicable.
DF	=	Dilution Factor.
NR	*	Not Required.
SP 7.	=	Indicates Spiked Compound

mmz\10-94\gloss.voa



TECHNICAL FLAGS FOR MANUAL INTEGRATION

Manual quan modifications or integrations are performed routinely to improve the data quality for a variety of technical reasons. Documentation of these modifications should be clear and concise. The following "flags" are used to indicate the technical reasons for quan modifications:

- MP Missed Peak: manually added peak not found by automatic quan program.
- PA Peak Assignment: quan report was changed to reflect correct peak assignment.
- RI Routine Integration: routine integrations are performed for some analytes that are consistently integrated improperly by the automatic integration programs. Examples are the dichlorobenzene isomers on the VOA packed column and benzo(b)fluoranthene/benzo(k)fluoranthene which are poorly resolved on the BNA column.
- SP Split Peak: the automatic integration improperly split the peak; a manual integration was performed to get the correct area.
- CB Coelution/Background: peak was manually integrated to eliminate contribution from coeluting compounds, background signal, or other interference.
- Proper Integration: a peak with poor or inconsistent integration (e.g., excessive tail) was properly integrated manually.

Recra LabNet - Lionville Laboratory

Volatiles By GC/MS, Special List

Report Date: 01/10/01 23:19 Client: TNUHANFORD B99-093 H1172 Work Order: 10985001001 Page: la RFW Batch Number: 0012L422

*= Outside of EPA CLP QC limits.

	Cust ID:	B111F1	B111F1	B111F1	B111F2	B111F3	B111F4		
Sample	RFW#:	001	001 MS	001 MSD	002	003	004		
Information	Matrix:	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID 205		
	D.F.:	195	195	195	10.5	20.5			
	Units: Level:	UG/KG MED	UG/KG MED	UG/KG MED	UG/KG MED	UG/KG MED	UG/KG MED		
	never,		7100						
	1,2-Dichloroethane-d4	105 %	110 %	111 %	104 %	106 %	108 %		
Surrogate	Toluene-d8	100 %	97 %	101 %	102 %	101 %	102 %		
Recovery	Bromofluorobenzene	93 %	92 %	92 %	92 %	87 %	91 %		
Carbon Tetra	######################################	=======f1=	======fl=	======fl== 115 %	=======f1 92000	=======fl 180000	========f] 2400000		
	Cust ID:	B111D7	B111D8	B111D9	B111F0	VBLKIZ	VBLKIZ BS		
Sample	RFW#:	005	006	007	008	00LVN409-MB1			
7-6	** · · · · · · · · · · · · · · · · · ·	001 TD		·			00LVN409-MB1		
Information	Matrix:	SOLID	SOLID	SOLID	SOLID	SOIL	SOIL		
Information	D.F.:	205	SOLID 205	SOLID 100	SOLID 10.5	SOIL 2.00	SOIL 2.00		
Information			SOLID	SOLID	SOLID	SOIL	SOIL		
Information	D.F.: Units:	205 UG/KG	SOLID 205 UG/KG	SOLID 100 UG/KG	SOLID 10.5 UG/KG	SOIL 2.00 UG/KG	SOIL 2.00 UG/KG		
Information Surrogate	D.F.: Units: Level:	205 UG/KG MED	SOLID 205 UG/KG MED	SOLID 100 UG/KG MED	SOLID 10.5 UG/KG MED	SOIL 2.00 UG/KG MED	SOIL 2.00 UG/KG MED		
Surrogate Recovery	D.F.: Units: Level: 1,2-Dichloroethane-d4 Toluene-d8 Bromofluorobenzene	205 UG/KG MED 113 % 104 % 95 %	SOLID 205 UG/KG MED 111 % 103 % 92 %	SOLID 100 UG/KG MED 104 % 102 % 94 %	SOLID 10.5 UG/KG MED 111 % 106 % 85 %	2.00 UG/KG MED 106 % 96 % 83 %	SOIL 2.00 UG/KG MED 110 % 104 % 97 %		
Surrogate Recovery	D.F.: Units: Level: 1,2-Dichloroethane-d4 Toluene-d8 Bromofluorobenzene	205 UG/KG MED 113 % 104 % 95 %	SOLID 205 UG/KG MED 111 % 103 % 92 %	SOLID 100 UG/KG MED 104 % 102 % 94 %	SOLID 10.5 UG/KG MED 111 % 106 % 85 %	2.00 UG/KG MED 106 % 96 % 83 %	SOIL 2.00 UG/KG MED 110 % 104 % 97 %		

Recra LabNet - Lionville Laboratory

Volatiles By GC/MS, Special List

Report Date: 01/10/01 23:19

RFW Batch Number: 0012L422 Client: TNUHANFORD B99-093 H1172 Work Order: 10985001001 Page: 2a

Cust ID: VBLKIQ

 Sample
 RFW#: 00LVN410-MB1

 Information
 Matrix: SOIL

 D.F.: 2.00
 Units: UG/KG

 Level: MED

	1,2-Dichloroethane-d4	105	8	
Surrogate	Toluene-d8	103	8	
Recovery	Bromofluorobenzene	92	ક્ષ	
==========		=======	==fl=	fl
Carbon Tetrachloride			U	

^{*=} Outside of EPA CLP QC limits.

Ø

RECRA LabNet Use Only

Custody Transfer Record/Lab Work Request Page ____ of ____. Note: Complete Only Shaded Areas



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Fredesc

Theopel

12-100 10945

COMPOSTIE

WASTE

Refrigerator # client True Hanford B99-093 Liquid Est. Final Proj. Sampling Date . #/Type Container Project # 10985-001-001-9999-00 Solid Llouid Project Contact/Phone # _ Volume Solid RECRA Project Manager 05 Preservatives ac Spec TAT 30 dou Del 510 ORGANIC INORG ANALYSES Date Rec'd 12-1:00 Date Due 12-31:00 Pest/ PCB š REQUESTED Account # **RECRA LabNet Use Only** Matrix MATRIX QC CODES: Date Lab Chosen Time Matrix Client ID/Description S - Soil Collected Collected **(~)** SE - Sediment SO - Solid MS MSD SL - Sludge W - Water BILLEI 112900 1115 201 0 -Oil A - Air 3 DS - Drum Solida ഹ് 150 DL - Drum Liquids COH EP/TCLP Leachate **Lama** യട 050 Wipe X - Other DB1035 ∞_{Δ} F٠ PGയി 1050 00A FO DATE/REVISIONS: Special Instructions: Saf B99-093 **RECRA LabNet Use Only** Run Matrix QC Samples were: COC Tape was: 1) Shipped .-- or 1) Present on Outer Hand Delivered ____ Package (Y) or N IXA: Carbon tetrachloride Airbin & See Deleus 2) Unbroken on Outer Package (T) or N 2) Ambient or Chilled 3) Present on Sample 3) Received In Good (r) or N Condition Y or N 4) Unbroken on 4) Labels Indicate Sample (Y) or N Properly Preserved **COC Record Present** Relinguished Received (Y) or N Relinquished Received Date Time Discrepancies Between Onte Time Upon Sample Rec't

ORIGINAL

Samples Labels and

NOTES:

COC Record? Y or N

l4235*795*4*0*875

5) Received Within

(Y) or N

Holding Times

(Y) or N

Cooler 4.5_ ·c

Bechtel Hanford Inc.				CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUI									r	B	99-093-20	Page <u>l</u>	of Î	
Collector Company Contact TMJOHANSEN VJROHAY						Telephone No. 372-9100 Project Coordinator TRENT, SJ							nator	Price Code	9N		rnaround	
Project Designation 200-ZP-2 Passive		Extraction - Other Soli		mpling 200W	Location							F No. 1-093		Air Qualit	y []	45)	Days	
Ice Chest No. 2R099.00% (104) Field Logbook No. EL-1516						COA Method of Shipment FED EX						ment						
on the second						610\$39 Bill						Bill of Lading/Air Bill No. 953 0875						
POSSIBLE SAMPLE HAZARDS/REMARKS Preservation					Cool 4C									_				
				7	Type of Container	аG	1											
				N	No. of Container(s)	Ī												
Special Handling a Sample originated in		age gical zone <2000pci/g			Volume	250mL											T .	
SAMPLE ANALYSIS					VOA - \$260/ (TCL) {Carbon tetrachloride} Moisture Content - D2216													
Sample No	0.	Matrix *	Sample D	ale	Sample Time	<u> </u>	1	-	nga dagar	1.14		, t	44 E	美國	3 N. 2.5	13 学校 64		
B111F1		OTHER SOLID	11-24	1-00	1115	イ												
B111F2		OTHER SOLID	11-29	110	1130	X										÷		
B111F3		OTHER SOLID	11-29		1150	X												
B111F4		OTHER SOLID	11-	2900) /20D	X												
222 A BALCOS DA																		
Relinquished By Relinquished By Relinquished By Relinquished By Date/Time Received By						ate/Time ate/Time OFF/S ate/Time	\$00	SPECIAL INSTRUCTIONS ** 1 aboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found. ** 1 aboratory must include the % Moisture data as part of all hard copy reports. Samples stored in Ref.# 10 at the 3728 Shipping Facility on 1/2/100 Collector not available to relinquish samples on 1/30/100 for shipment. Date/Time									Matrix * S=Soil SE=Soliment SO=Soild S =Shulpe W = Water O=Old A=Alr DS=Drum Solids DL=Drum Liquids T=Tiesse W1=Wlpc L=Liquid V=Vegetation X=Other	
SECTION FINAL SAMPLE	Disposal Met	thad				·····			, Dia	sed By								
DISPOSITION	Disposal Nice	ind							изро	sea ny					138	ate/1 ime		

Bechtel Har	nford Inc.	CI	HAIN OF CUST		B99	-093-19	Page 1	of <u>1</u>							
Collector TMJOHANSEN	nny Contact OHAY	Telephone No. 372-9100 Project Coordinator TRENT, SJ								Title Code 314			rnaround Days		
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid Sampling Location 200W					SAF No. B99-093						/	Air Quality []			———
Ice Chest No. ERC	COA Method of Shipmen R20ZP2DP60 FED EX														
Shipped 76 TMARECRA) Ø3'	7		:	1	Bill	423	## N	°\$3 <u>~</u>	_୦ଃ	775	f			
POSSIBLE SAMPLE HAZARDS/REMARKS Preservation							•								
			Type of Container	аG											
			No. of Container(s)	1	1										
Special Handling and/or Sample originated in non-ti-	r Storage radiological zone <2000pci/g		Volume	250mL											
SAMPLE ANALYSIS															
Sample No.	Matrix *	Sample Date	Sample Time	16,41.2	(Del	Ar Tyler Kr	高热, 【	,		de la	44	No de	14.434	445	14-13-12
B111D7	OTHER SOLID	11-24-66	1)20	X											
B111D8	OTHER SOLID	11-29-0) /035	イ											
B111D9	OTHER SOLID	11-24-00	1050	×											
B111F0	OTHER SOLID	11-29-00	רטוו	×										<u> </u>	
				<u> </u>	丄								<u> </u>	<u> </u>	
Relinquished By	ate/Time ate/Time ate/Time ate/Time	400 800 0	** La compo	unds found. boratory must Samples Shipping	include i stored Facili	ium leventhe % A in Re ty on		as part of al		ns.	ologenated	Matrix * S-Soli SE-Solince SO-Solid \$ - Shedge W - Weter O-OH A-Alr OS-Drum Solids DL-Drum Liquids T-Tissue WI-Wipe L-Liquid V-Vegetation X-Ohler			
SECTION Dispo	osal Method						ltions	sed By						Date/Time	
FINAL SAMPLE Dispo	POR INSCRIPCIO						ілѕро	sen ny						ANC I WITE	